Metadata for Agate Fossil Beds National Monument, Field Plots Data Base for Vegetation Mapping

Identification_Information:
  Citation:
    Citation_Information:
      Originator: U.S. Geological Survey Department of the Interior
      Publication_Date: 199808
      Title:
        Agate Fossil Beds National Monument, Field Plots Data Base for
        Vegetation Mappings
      Geospatial_Data_Presentation_Form: Database
      Series_Information:
        Series_Name: USGS-NPS Vegetation Mapping Program
        Issue_Identification: Agate Fossil Beds National Monument
      Publication_Information:
        Publication_Place: Denver, CO
        Publisher: USGS, Biological Resources Division, Center for Biological Informatics
      Other_Citation_Details:
        Created in large part by Environmental Systems Research Institute, Inc.,
        Redlands, CA under contract from USGS/BRD/CBI.
      Online_Linkage: http://biology.usgs.gov/npsveg/agfo/fielddata.html
  Description:
    Abstract:
      Vegetation field plots at Agate Fossil Beds NM were visited, described,
      and documented in a digital database. The database consists of 2 parts -
      (1) Physical Descriptive Data, and (2) Species Listings.
    Purpose:
      Provide National Parks with the necessary tools to effectively manage
      their natural resources. Plot data is collected and analyzed to develop a
      classification (using the Standardized National Vegetation Classification
      System) and description of vegetation types in preparation for
      photointerpretation and mapping of the monument's vegetation types.
  Time_Period_of_Content:
    Time_Period_Information:
      Range_of_Dates/Times:
        Beginning_Date: 19950710
        Ending_Date: 19950815
    Currentness_Reference: Ground Condition
  Status:
    Progress: Complete
    Maintenance_and_Update_Frequency: none planned
  Spatial_Domain:
    Bounding_Coordinates:
      West_Bounding_Coordinate: -103.8
      East_Bounding_Coordinate: -103.7
      North_Bounding_Coordinate: 42.44167
      South_Bounding_Coordinate: 42.40833
    Description_of_Geographic_Extent:
      Agate Fossil Beds National Moument,
      Nebraska and a 400 meter buffer.
  Keywords:
    Theme:

Theme_Keyword_Thesaurus: None
Theme_Keyword: National Park Service
Theme_Keyword: U.S. Geological Survey
Theme_Keyword: The Nature Conservancy
Theme_Keyword: Aerial Information Systems
Theme_Keyword: Center for Biological Informatics
Theme_Keyword: land cover
Theme_Keyword: vegetation
Theme_Keyword: association
Theme_Keyword: Environmental System Research Institute
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: Nebraska
Place_Keyword: NE
Place_Keyword: Agate Fossil Beds National Monument
Taxonomy:
Keywords/Taxon:
Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: vegetation classification
Taxonomic_Keywords: Standardized National Vegetation Classification System
Taxonomic_Keywords: alliance
Taxonomic_Keywords: community association
Taxonomic_Classification:
Taxon_Rank_Name: Kingdom
Taxon_Rank_Value: Plantae
Access_Constraints: None
Use_Constraints:
Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analyses. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations or credit should be given to the U.S. Geological Survey and the National Park Service.
Point_of_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization: USGS Biological Resources Division, Center for Biological Informatics
Contact_Address:
Address_Type: Physical Address
Address: U.S. Geological Survey, Biological Resources Division
Address: Center for Biological Informatics
Address: Building 810, Room 8000
City: Denver
State_or_Province: Colorado
Postal_Code: 80225-0046
Country: USA
Contact_Address:
Address_Type: Mailing Address
Address: U.S. Geological Survey, Biological Resources Division
Address: Center for Biological Informatics
Address: PO BOX 25046, DFC, MS302
City: Denver
State_or_Province: Colorado
Postal_Code: 80225-0046
Country: USA
Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219 (org)
Contact_Facsimile_Telephone: (303) 202-4229
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Browse_Graphic:
Browse_Graphic_File_Name: <http://biology.usgs.gov/npsveg/agfo/images/agfoplots.gif>
Browse_Graphic_File_Description: Locations of vegetation plot samples; low resolution for web browsing.
Browse_Graphic_File_Type: GIF
Data_Set_Credit: BRD-USGS, U.S. BOR, TNC
Native_Data_Set_Environment: DB4

Data_Quality_Information:
Attribute_Accuracy:
Attribute_Accuracy_Report:
The descriptive plot data were collected for 39 sites whose vegetation represents a full spectrum of alliance types present within Agate Fossil Beds National Monument and its immediate surroundings. Physical description - Attributes collected for each site include: a plot number, a unique plot identification code, community name, field name, state, park name, quad name, map projection, datum, GPS file name, raw UTM coordinates, differentially corrected UTM coordinates, plot survey date, name(s) of surveyors, length, width, photo type, elevation, slope, aspect, topographic position, landform, surface geology, Cowardin System category, hydrology, surface material description, soil texture, soil drainage, leaf phenology, leaf type, and physiognomy. Species - Individual species described at each of 39 plots is listed, one line per species, with the following information: Plot Identification Code, Numeric Species Code, Species Name, Species Cover (0=trace, 1=< 1%, 2=1-5%, 3=5-25%, 4=25-50%, 5=50-75%, 6=75-100%), Plantcode, and Strata Code (T1=emergent, T2=canopy, T3=sub-canopy, S1=tall shrub, S2=short shrub, H=herbaceous, N=non-vascular, V=vinae/liana, E=epiphyte).
Logical_Consistency_Report:
Physical description - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors. Species - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors, as defined above under "Attribute Accuracy Report". NOTE1: The significance of numbers appended to some of the Plant Codes is not known.
Completeness_Report:
Physical description - Comprehensive descriptions exist for each of the 39 plots, but some do not contain entries under headings which are not applicable, and some plots do not have locational coordinates. Species - One species is entered per line, by plot code, with multiple species listed for each plot, one per row. Plot codes and species names are complete for each row, but some species codes, cover and strata information is missing (because it was not present on the original field forms).
Positional_Accuracy:
Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report:
X,Y UTM coordinates representing each of the 39 plots were collected via GPS under selective availability with post processing for differential correction. The differentially correted GPS coordinates have accuracies in the X and Y direction of +/- 2 to 5 meters.
Vertical_Positional_Accuracy:
Vertical_Positional_Accuracy_Report: Not applicable
Lineage:
Methodology:

Methodology_Type: Field
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: releve
Methodology_Keyword: plot
Methodology_Keyword: sampling
Methodology_Description: Field sampling using releve plots
Source_Information:
Source_Citation:
Citation_Information:
Originator: National Biological Survey (Now USGS/Biological Resources Division)
Originator: and National Park Service
Publication_Date: 199411
Title:
Standardized National Vegetation Classification System; protocol document for the USGS-NPS Vegetation mapping Program (unpublished report)
Geospatial_Data_Presentation_Form: document
Edition: Final Draft
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Protocol documents
Publication_Information:
Publication_Place: Denver, CO
Publisher: USGS/BRD, Center for Biological Informatics
Other_Citation_Details:
Report prepared under contract by The Nature Conservancy, 1815 N. Lynn Street, Arlington, Virginia 22209 and Environmental Systems Research Institute, 380 New York Street, Redlands, California 92373
Online_Linkage: http://biology.usgs.gov/npsveg/classification/index.html
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 199411
Ending_Date: 2010
Source_Currentness_Reference: Publication Date and indefinitely
Source_Citation_Abbreviation: SNVCS protocol document
Source_Contribution:
This document describes and defines the vegetation classification system which is to be used for describing and mapping the vegetation at Agate Fossil Beds National Monument
Source_Information:
Source_Citation:
Citation_Information:
Originator: USGSBRD, Center for Biological Informatics
Publication_Date: 19980223
Title:
Classification of the Vegetation of Agate Fossil Beds National Monument
Geospatial_Data_Presentation_Form: report
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Agate Fossil Beds National Monument
Publication_Information:
Publication_Place: Denver, CO

Publisher: USGS/BRD, Center for Biological Informatics
Other_Citation_Details:
This report was generated by The Nature Conservancy under contract to the USGS/BRD, Center for Biological Informatics
Online_Linkage: http://biology.usgs.gov/npsveg/agfo/methods.pdf
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 19950710
Ending_Date: 19950815
Source_Currentness_Reference: Ground Condition, summer 1995
Source_Citation_Abbreviation: AGFO sample and classification
Source_Contribution: Report summarizing plot data collection effort
Source_Information:
Source_Citation:
Citation_Information:
Originator:
United States Dept. of the Interior, National Biological Survey (no USGS Biological Resources Division) and the National Park Service
Publication_Date: 199412
Title: Field Methods for Vegetation Mapping
Geospatial_Data_Presentation_Form: document
Publication_Information:
Publication_Place: Denver, CO
Publisher:
USGS/Biological Resources Division, Center for Biological Informatics
Other_Citation_Details:
This report was generated by The Nature Conservancy under contract to the USGS/BRD, CBI
Online_Linkage: http://biology.usgs.gov/npsveg/fieldmethods/index.html
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 199412
Ending_Date: 2010
Source_Currentness_Reference: Publication Date and indefinitely
Source_Citation_Abbreviation: field methods protocol document
Source_Contribution:
This document defines the methods and protocols for field data collection to be used as part of the USGS-NPS Vegetation Mapping Program
Process_Step:
Process_Description:
The following describes the tasks performed by The Nature Conservancy to produce descriptive data for 39 vegetation sampling plots in two separate database files. Physical description - The first of the two contains general descriptive information at each of the plots. Plot sites were selected subjectively because of the heterogeneity of the vegetation and the small number of samples per type. Since aerial photos were not available at the time of plot selection, visual reconnaissance was conducted at the summit of the monument to examine vegetation patterns for the purpose of plot placement. Site physical parameters, species types, and vegetation strata were then described at each site. The PLOT DATA database contains tabulations of site

physical factors, listed under the ATTRIBUTE ACCURACY REPORT for each of the 39 plots. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the AGATE FOSSIL BEDS SAMPLING AND CLASSIFICATION REPORT. Species - The second of the two contains listings of individual species found in each plot, along with height and cover estimates, and strata delineations. The SPECIES LISTING database contains line entries for each species including the Plot Code, Numeric species code, full scientific species name, cover estimate, a unique alphnumeric species identifier (plant code), and Plant Strata delineation. Plot sites were selected subjectively because of the heterogeneity of the vegetation and the small number of samples per type. Since aerial photos were not available at the time of plot selection, visual reconnaissance was conducted at the summit of the bluff to examine vegetation patterns for determining plot placement. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the AGATE FOSSIL BEDS SAMPLING AND CLASSIFICATION REPORT.

Source_Used_Citation_Abbreviation: SNVCS protocol document
Source_Used_Citation_Abbreviation: Field Methods for Vegetation Mapping
Process_Date: 199508
Source_Produced_Citation_Abbreviation: AGFO sample and classification
Source_Produced_Citation_Abbreviation: AGFO Vegetation Descriptions
Process_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Jim Drake
Contact_Organization: The Nature Conservancy
Contact_Position: Regional Chief Ecologist, The Nature Conservancy
Contact_Address:
Address_Type: Physical Address
Address: 1313 5th Street SE
Address: Suite 314
City: Minneapolis
State_or_Province: MN
Postal_Code: 55414
Country: USA
Contact_Voice_Telephone: (612)331-0729
Contact_Electronic_Mail_Address: jdrake@tnc.org

Spatial_Data_Organization_Information:
Indirect_Spatial_Reference:
Agate Fossil Beds National Monument is in Sioux County, Nebraska near the headwaters of the Niobrara River. The mound is located 20 miles south of Harrison, Nebrasaka.
Direct_Spatial_Reference_Method: Point
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Point

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:

Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 13
Transverse_Mercator:
Longitude_of_Central_Meridian: -105
Latitude_of_Projection_Origin: 0
False_Easting: 500000
False_Northing: 0
Scale_Factor_at_Central_Meridian: .9996
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 1
Ordinate_Resolution: 1
Planar_Distance_Units: Meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodedic Reference System 80
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257

Entity_and_Attribute_Information:
Overview_Description:
Entity_and_Attribute_Overview:
Each of 39 vegetation mapping plot sites contains the attributes of species found. Physical description - General plot information is described by identification codes, locational information (including state, park name, and USGS 7 1/2' topographic quad name). Physical factors tabulated in the database include UTM_X, UTM_Y, UTM Zone, map projection, survey date, name of surveyors, plot lenght and width, type of photos used, plot elevation, slope aspect, topographic position, landform type, surface geology, Cowardin system descriptor, hydrology, rock size, surface material type, soil texture and drainage, leaf phenology, leaf type, and physiognomy. Species - Species - (sp_code is a project specific code for each species found, species is the scientific name for that species, spcover is the species present and the percent cover for each species, plant code is the first two letters of the genus and first two letters of the species. If the code are not unique a number is added to make the code unique). This includes strata cover which is an average percent cover of that particular species, 1 = 0-10%, 2 = 10-25%, 3 = 25-60% and 4 = 60-100%, pstrata is the type of vegetation, T1 = emergent, T2 = canopy, T3 = sub-canopy, S1 = tall shrub, S2 = short shrub, H = herbaceous, N = non-vascular, V = vine/liana, and E = epiphyte).
Entity_and_Attribute_Detail_Citation:
Field Methods for Vegetation mapping, December 1994. Prepared for: the United States Department of the Interior, National Biological Survey (now the USGS Biological Resources Division) and the National Park Service. Prepared by: The Nature Conservancy, and Environmental Systems Research Institute. (http://biology.usgs.gov/npsveg/fieldmethods/index.html) .

Distribution_Information:
Distributor:
Contact_Information:
Contact_Person_Primary:

Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization:
U.S. Geological Survey, Center for Biological
Informatics
Contact_Address:
Address_Type: mailing and physical address
Address:
U.S. Geological Survey, Center for Biological
Informatics, MS 302, Room 8000, Building 810,
Denver Federal Center
City: Denver
State_or_Province: Colorado
Postal_Code: 80225
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: 303-202-4229
Contact_Facsimile_Telephone: 303-202-4219 (org)
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Resource_Description: AGFO Physical Descriptive Data nad Species Listing Data
Distribution_Liability:
Although these data have been processed successfully on a computer system at the Biological Resources Division, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a Biological Resources Division server, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The Biological Resources Division shall not be held liable for improper or incorrect use of the data described and/or contained herein.
Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Format_Name: HTML
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: http://biology.usgs.gov/npsveg/agfo/fielddata.html
Fees: None

Metadata_Reference_Information:
Metadata_Date: 20011022
Metadata_Review_Date: 20050518
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Address:
Address_Type: mailing and physical address
Address:
U.S. Geological Survey, Center for Biological Informatics, MS 302,
Room 8000, Building 810, Denver Federal Center
City: Denver
State_or_Province: Colorado

Postal_Code: 80225
Country: USA
Contact_Voice_Telephone: (303) 202-4220
Contact_Facsimile_Telephone: (303) 202-4219
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part 1: Biological Data Profile, 1999
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Extensions:
Online_Linkage: http://biology.usgs.gov/fgdc.bio/bionwext.txt
Profile_Name: Biological Data Profile FGDC-STD-001.1-1999